

Rpt.

REPORT ON MACHINERY.

No. 17968

Received at London Office

WED. 1 MAR. 1922

Date of writing Report 16 Dec 1922 When handed in at Local Office

23/2/1922 Port of

Greenock

FRI. JUN. 2 1922

No. in Survey held at Greenock

Date, First Survey

30th March, 1921

Last Survey

23rd Feby. 1922

Reg. Book.

on the vessel named

Hauvicaa

1921

Apr 19

(Number of Visits 98)

Last May 26 1922 18

Gross 5037

Net 2902

Master

Built at Lismahany

By whom built

John S. Kincaid & Co Ltd

When built 1922

Engines made at

Greenock

By whom made

John S. Kincaid & Co Ltd

when made 1922

Boilers made at

Greenock

By whom made

John S. Kincaid & Co Ltd

when made 1922

Registered Horse Power

Owners Compagnie Auxiliaire de Navigation

belonging to Havre

Nom. Horse Power as per Section 28

495

Is Refrigerating Machinery fitted for cargo purposes

No

Is Electric Light fitted

Yes

ENGINES, &c.—Description of Engines

Triple Compound

No. of Cylinders Three

No. of Cranks Three

Dia. of Cylinders

20" - 43" - 72"

Length of Stroke

48"

Revs. per minute

70

Dia. of Screw shaft

as per rule 14.7

Is the screw shaft fitted with a continuous liner the whole length of the stern tube

Yes

Is the after end of the liner made water tight

Yes

If the liner is in more than one length are the joints burned

Yes

If the liner does not fit tightly at the part

Yes

between the bearings in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive

Yes

If two

liners are fitted, is the shaft lapped or protected between the liners

Yes

Length of stern bush

65"

Dia. of Tunnel shaft

as per rule 13.05

Dia. of Crank shaft journals

as per rule 13.7

Dia. of Crank pin

14"

Size of Crank webs

21.875

Dia. of thrust shaft under

collars

Dia. of screw

Pitch of Screw

No. of Blades

State whether moveable

Total surface

102 sq ft

No. of Feed pumps

2

Diameter of ditto

Stroke

Can one be overhauled while the other is at work

Yes

No. of Bilge pumps

2

Diameter of ditto

Stroke

Can one be overhauled while the other is at work

Yes

No. of Donkey Engines

SIZES of Pumps

No. and size of Suctions connected to both Bilge and Donkey pumps

In Engine Room

Three 3/4"

In Holds, &c.

2 - 3 1/2"

Circulating pump

Refrigerating Engine

No. of Bilge Injections

9

Connected to condenser, or to circulating pump

Is a separate Donkey Suction fitted in Engine room & size

Yes - 4"

Are all the bilge suction pipes fitted with roses

Yes

Are the roses in Engine room always accessible

Yes

Are the sluices on Engine room bulkheads always accessible

Yes

Are all connections with the sea direct on the skin of the ship

Yes

Are they Valves or Cocks

Both

Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates

Yes

Are the Discharge Pipes above or below the deep water line

Both

Are they each fitted with a Discharge Valve always accessible on the plating of the vessel

Yes

Are the Blow Off Cocks fitted with a spigot and brass covering plate

Yes

What pipes are carried through the bunkers

Yes

How are they protected

Yes

Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times

Yes

Are the Bilge Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges

Yes

Is the Screw Shaft Tunnel watertight

Yes

Is it fitted with a watertight door

Yes

worked from

Engine room

Yes

Is the Screw Shaft Tunnel watertight

Is it fitted with a watertight door

Yes

worked from

Engine room

Yes

Is the Screw Shaft Tunnel watertight

Is it fitted with a watertight door

Yes

BOILERS, &c.—(Letter for record)

Manufacturers of Steel

J. S. Kincaid & Co. Ltd. Glasgow

Total Heating Surface of Boilers

7272 sq ft

Is Forced Draft fitted

Yes

No. and Description of Boilers

Three single ended

Working Pressure

180 lb

Tested by hydraulic pressure to

320 lb

Date of test

9/12/21

No. of Certificate

1594

Can each boiler be worked separately

Yes

Area of fire grate in each boiler

59 sq ft

No. and Description of Safety Valves to

each boiler

Area of each valve

9.42 sq ft

Pressure to which they are adjusted

185 lb

Are they fitted with easing gear

Yes

Smallest distance between boilers or uptakes and bunkers

15"

Mean dia. of boilers

14.10"

Length

11.9'

Material of shell plates

Steel

Thickness

Range of tensile strength

28-32

Are the shell plates welded or flanged

Yes

Descrip. of riveting

seams all in lap

long. seams

all in lap

Diameter of rivet holes in long. seams

1 1/4"

Pitch of rivets

8 7/8"

Lap of plates or width of butt straps

18 7/8"

Per centages of strength of longitudinal joint

rivets 87.6

plate 86.0

Working pressure of shell by rules

183 lb

Size of manhole in shell

16.12"

Size of compensating ring

Hanged 17/32"

No. and Description of Furnaces in each boiler

3 Design

Material

Steel

Outside diameter

47 1/2"

Length of plain part

top 9 1/2"

Thickness of plates

crown 9 1/2"

Description of longitudinal joint

welded

No. of strengthening rings

Crown

Working pressure of furnace by the rules

185 lb

Combustion chamber plates: Material

Steel

Thickness: Sides

10 1/2"

Back

2 1/2"

Top

10 1/2"

Bottom

12 1/2"

Pitch of stays to ditto: Sides

9.81"

Back

9.81"

Top

9.81"

If stays are fitted with nuts or riveted heads

Yes

Working pressure by rules

187 lb

Material of stays

Steel

Area at smallest part

1.73

Area supported by each stay

79.5"

Working pressure by rules

190 lb

End plates in steam space:

Material

Steel

Thickness

1 1/4"

Pitch of stays

20"

How are stays secured

all in lap

Working pressure by rules

183 lb

Material of Front plates at bottom

Steel

Thickness

2 1/2"

Greatest pitch of stays

13 7/8"

Working pressure of plate by rules

193 lb

Diameter of tubes

2 1/2"

Pitch of tubes

3 1/2" - 3 7/8"

Material of tube plates

Steel

Thickness: Front

3 1/2"

Back

2 1/2"

Mean pitch of stays

9.28"

Pitch across wide water spaces

13 1/2"

Working pressures by rules

203 lb

Girders to Chamber tops: Material

Steel

Depth and

thickness of girder at centre

9 1/4" - 1 1/2"

Length as per rule

34.65

Distance apart

9"

Number and pitch of stays in each

Three 8 1/2"

Working pressure by rules

185 lb

Steam dome: description of joint to shell

% of strength of joint

Diameter

Thickness of shell plates

Material

Description of longitudinal joint

Diam. of rivet holes

Pitch of rivets

Working pressure of shell by rules

Crown plates

Thickness

How stayed

SUPERHEATER. Type

Date of Approval of Plan

Tested by Hydraulic Pressure to

Date of Test

Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler

Diameter of Safety Valve

Pressure to which each is adjusted

Is Easing Gear fitted

Yes

Lloyd's Register

W58-0125

IS A DONKEY BOILER FITTED? *None*If so, is a report now forwarded? *-*

SPARE GEAR. State the articles supplied:— *The top end bolts. The bottom end bolts. The main hoisting bolts. One set coupling bolts. One set end pump valves. One set bridge pump valves. Both ends. Two spare safety blades. Two safety valves. One escape valve spring each side. One end check valve. Two valves bottom end bushes. Top end lock. One valve spindle. One sec. escape stop. One set H.P. & L.P. piston rings. One pump rod. Impeller for circulating pump. C*

The foregoing is a correct description,

FOR JOHN G. KINCAID & COY., LIMITED

Robert Green

Secretary

Manufacturer.

Dates of Survey while building { During progress of work in shops -- 1921 Mar 30-31. Apr. 7-15-20-22. May 4-11-13-19-24-25-27-30. Jun 2-6-7-8-9-14-22-24-29-29. July 14-18-20-21-25-29. Aug 2-9-12-16-17-18-23-29. Sept 4-13-16-22-28-30. Oct 4-7-10-12-13-14-17-18-21-25-28-31. Nov 1-2-7-8-17-25-28-30. Dec 2-7-9-13-15-16-20-23-27-28-29. 1922 Jan 10-11-17-20-26-28. Feb 1-2-3-6-7-8-9-10-16-17-21-23. Is the approved plan of main boiler forwarded herewith *Yes*

Total No. of visits *98* *18 Belfast 19-4-21 to 26-4-22*

Dates of Examination of principal parts—Cylinders *29/12/21* Slides *7/2/22* Covers *9/2/22* Pistons *7/2/22* Rods *7/2/22*
Connecting rods *13/2/21* Crank shaft *23/1/21* Thrust shaft *23/1/21* Tunnel shafts *-* Screw shaft *8/2/22* Propeller *8/2/22*
Stern tube *13/1/22* Steam pipes tested *25/1/22* Engine and boiler seatings *8/3/22* Engines holding down bolts *12/4/22*
Completion of pumping arrangements *28/5/22* Boilers fixed *12/4/22* Engines tried under steam *26/5/22*
Completion of fitting sea connections *8/3/22* Stern tube *8/3/22* Screw shaft and propeller *8/3/22*
Main boiler safety valves adjusted *3/5/22* Thickness of adjusting washers *8-1/2 32*
Material of Crank shaft *Steel* Identification Mark on Do. *625* Material of Thrust shaft *Steel* Identification Mark on Do. *625*
Material of Tunnel shafts *Steel* Identification Marks on Do. *V* Material of Screw shafts *Steel* Identification Marks on Do. *625*
Material of Steam Pipes *Steel* Test pressure *600 lbs sq*
Is an installation fitted for burning oil fuel *Yes* Is the flash point of the oil to be used over 150° F. *Yes*
Have the requirements of Section 49 of the Rules been complied with *Yes*
Is this machinery duplicate of a previous case *No* If so, state name of vessel *No*
General Remarks (State quality of workmanship, opinions as to class, &c.) *Workmanship good.*

The machinery and boilers of this steamer have been constructed under special survey and have now been sent to Londonderry where they will be fitted on board. Now securely fitted on board, and in trial in Lough Fough machinery worked satisfactorily.

In our opinion, it is eligible for record + L.M.C. 6-22, with notation "Fixed Draft" "Electric Light", & "Fitted for oil fuel F.P. above 150° F."

It is submitted that this vessel is eligible for THE RECORD

+ L.M.C. - 5.22. F.D. C.L.

Fitted for Oil Fuel, 5.22, F.P. above 150° F.

Am. L.J. 6/6/22.

The amount of Entry Fee ... £ *5.00*

When applied for.

4/5 Special Report ... £ 79-17-0

When received.

Travelling Expenses (if any) £ *17.6-6*

Committee's Minute

Assigned *Deferred*

29/12/1922. Paid for 29-5-22

James James R.F. Bowring

Engineer Surveyor to Lloyd's Register of Shipping.

JUN. 16 1922

TUES. 1 JUL 1924

Certificate (if required) to be sent to The Surveyors are requested not to write on or below the space for Committee's Minute.

+ L.M.C. 5.22 F.D. C.L.
Fitted for oil fuel 5.22 F.P. above 150° F.
Lloyd's Register Foundation